

## WHAT IS CLAIMED IS:

1. An information recording medium on which there are recorded:

5 one or a plurality of first entity information, which is compressed and encoded by a first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents including at least video;

first management information for managing and controlling  
10 said first entity information;

one or a plurality of second entity information, which is compressed and encoded by a second compressing and encoding method, which is different from the first compressing and encoding method, for individually constituting Titles, each of which is a logical  
15 combination of contents same as or different from the contents of said first entity information; and

second management information for managing and controlling said first and second entity information.

20 2. The information recording medium according to claim 1, wherein said second management information includes, for each Title:

number information for indicating an identification number of said first or second entity information, which is uniquely given to  
25 each Title; and

identification information for identifying whether said

number information indicates the identification number of said first entity information or the identification number of said second entity information.

5 3. The information recording medium according to claim 1, wherein said second management information includes:

attribute information for indicating the compressing and encoding method for each of said first entity information; and

10 attribute information for indicating the compressing and encoding method for each of said second entity information.

4. The information recording medium according to claim 1, wherein said second management information includes:

15 total number information for indicating the total number of said first entity information; and

total number information for indicating the total number of said second entity information.

20 5. The information recording medium according to claim 1, wherein said second management information includes:

first menu information, which includes at least video information compressed and encoded by the first or second compressing and encoding method, for indicating a menu for user selection about at least said second entity information out of said  
25 first and second entity information; and

attribute information for indicating the first or second

compressing and encoding method by which said first menu information is compressed and encoded.

6. The information recording medium according to claim 1,  
5 wherein said second entity information includes:

second menu information, which includes at least video information compressed and encoded by the first or second compressing and encoding method, for indicating a menu for user selection about at least said second entity information out of said  
10 first and second entity information; and

attribute information for indicating the first or second compressing and encoding method by which said second menu information is compressed and encoded.

15 7. The information recording medium according to claim 1, wherein said first management information includes:

third menu information, which includes at least video information compressed and encoded by the first compressing and encoding method, for indicating a menu for user selection about said  
20 first entity information; and

attribute information for indicating the first compressing and encoding method by which said third menu information is compressed and encoded.

25 8. The information recording medium according to claim 1, wherein said first entity information includes:

fourth menu information, which includes at least video information compressed and encoded by the first compressing and encoding method, for indicating a menu for user selection about said first entity information; and

5           attribute information for indicating the first compressing and encoding method by which said fourth menu information is compressed and encoded.

9.       The information recording medium according to claim 1,  
10       wherein said second management information manages and controls said first entity information, by specifying said first management information, through said specified first management information.

10.       An information recording medium on which there are  
15       recorded:

          one or a plurality of entity information, which is compressed and encoded by a predetermined compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents including at least video; and

20       management information for managing and controlling said entity information,

          said management information including:

          number information for indicating an identification number of said entity information, which is uniquely given to each Title;

25       total number information for indicating the total number of said entity information; and

information for indicating a fact that there is no record of another entity information compressed and encoded by another compressing and encoding method, which is different from the predetermined compressing and encoding method.

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11. The information recording medium according to claim 10, wherein said management information includes:

menu information, which includes at least video information compressed and encoded by the predetermined compressing and encoding method or by the another compressing and encoding method, which is different from the predetermined compressing and encoding method, for indicating a menu for user selection about said entity information; and

attribute information for indicating the compressing and encoding method by which said menu information is compressed and encoded.

12. The information recording medium according to claim 10, wherein said entity information includes:

menu information, which includes at least video information compressed and encoded by the predetermined compressing and encoding method or by the another compressing and encoding method, which is different from the predetermined compressing and encoding method, for indicating a menu for user selection about said entity information; and

attribute information for indicating the compressing and

encoding method by which said menu information is compressed and encoded.

13. An information reproducing apparatus for reproducing an  
5 information recording medium, on which there are recorded: one or a  
plurality of first entity information, which is compressed and  
encoded by a first compressing and encoding method, for individually  
constituting Titles, each of which is a logical combination of contents  
including at least video; first management information for managing  
10 and controlling said first entity information; one or a plurality of  
second entity information, which is compressed and encoded by a  
second compressing and encoding method, which is different from the  
first compressing and encoding method, for individually constituting  
Titles, each of which is a logical combination of contents same as or  
15 different from the contents of said first entity information; and  
second management information for managing and controlling said  
first and second entity information,

said apparatus comprising:

a reading device for reading out information from the  
20 information recording medium;

a judgment device for judging whether or not the second  
management information is recorded on the information recording  
medium on the basis of the read information; and

a reproduction output device (i) for reproducing and  
25 outputting the first or second entity information in accordance with  
the second management information if it is judged by said judgment

device that the second management information is recorded and (ii) for reproducing and outputting the first entity information in accordance with first management information if it is judged by said judgment device that the second management information is not  
5 recorded.

14. An information reproducing apparatus for reproducing an information recording medium, on which there are recorded: one or a plurality of first entity information, which is compressed and  
10 encoded by a first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents including at least video; first management information for managing and controlling said first entity information; one or a plurality of  
15 second entity information, which is compressed and encoded by a second compressing and encoding method, which is different from the first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents same as or different from the contents of said first entity information; and  
20 first and second entity information, wherein said second management information includes, for each Title (i) number information for indicating an identification number of said first or second entity information, which is uniquely given to each Title and  
25 (ii) identification information for identifying whether said number information indicates the identification number of said first entity information or the identification number of said second entity

information,

said apparatus comprising:

a selection device for selecting a Title to be reproduced out of the Titles recorded on the information recording medium;

5 a reading device for reading out information from the information recording medium;

a judgment device for judging whether or not the second management information is recorded on the information recording medium on the basis of the read information;

10 a first identification device for identifying an identification number of the first or second entity information corresponding to the selected Title, in accordance with the number information in the second management information if it is judged by said judgment device that the second management information is recorded;

15 a second identification device for identifying whether the recognized identification number is the identification number of the first entity information or the identification number of the second entity information, on the basis of the identification information in the second management information; and

20 a reproduction output device for reproducing and outputting the first or second entity information corresponding to the selected Title on the basis of identification results by said first and second identification devices.

25 15. The information reproducing apparatus according to claim 13, wherein said reproduction output device includes a decoding device



which includes a first decoder corresponding to the first compressing and encoding method and a second decoder corresponding to the second compressing and encoding method.

- 5 16. The information reproducing apparatus according to claim 14, wherein said reproduction output device includes a decoding device which includes a first decoder corresponding to the first compressing and encoding method and a second decoder corresponding to the second compressing and encoding method.

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17. An information reproducing method of reproducing an information recording medium, on which there are recorded: one or a plurality of first entity information, which is compressed and encoded by a first compressing and encoding method, for individually  
15 constituting Titles, each of which is a logical combination of contents including at least video; first management information for managing and controlling said first entity information; one or a plurality of second entity information, which is compressed and encoded by a second compressing and encoding method, which is different from the  
20 first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents same as or different from the contents of said first entity information; and second management information for managing and controlling said first and second entity information,

25 said method comprising:

a judgment process of judging whether or not the second

management information is recorded on the information recording medium on the basis of information read by a reading device for reading out the information from the information recording medium; and

5           a reproduction output process (i) of reproducing and outputting the first or second entity information in accordance with the second management information if it is judged by said judgment process that the second management information is recorded and (ii) of reproducing and outputting the first entity information in  
10 accordance with first management information if it is judged by said judgment process that the second management information is not recorded.

18. An information reproducing method of reproducing an  
15 information recording medium, on which there are recorded: one or a plurality of first entity information, which is compressed and encoded by a first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents including at least video; first management information for managing  
20 and controlling said first entity information; one or a plurality of second entity information, which is compressed and encoded by a second compressing and encoding method, which is different from the first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents same as or  
25 different from the contents of said first entity information; and second management information for managing and controlling said

first and second entity information, wherein said second management information includes, for each Title (i) number information for indicating an identification number of said first or second entity information, which is uniquely given to each Title and  
5 (ii) identification information for identifying whether said number information indicates the identification number of said first entity information or the identification number of said second entity information,

said method comprising:

10 a judgment process of judging whether or not the second management information is recorded on the information recording medium on the basis of information read by a reading device for reading out the information from the information recording medium;

a first identification process of identifying an identification  
15 number of the first or second entity information corresponding to a Title which is selected as a Title to be reproduced out of the Titles recorded on the information recording medium, in accordance with the number information in the second management information if it is judged by said judgment process that the second management  
20 information is recorded;

a second identification process of identifying whether the recognized identification number is the identification number of the first entity information or the identification number of the second entity information, on the basis of the identification information in  
25 the second management information; and

a reproduction output process of reproducing and outputting

the first or second entity information corresponding to the selected Title on the basis of identification results by said first and second identification processes.

- 5 19. A computer program product in a computer-readable medium for tangibly embodying a program of instructions executable by a computer to make the computer function as an information reproducing apparatus for reproducing an information recording medium, on which there are recorded: one or a plurality of first entity  
10 information, which is compressed and encoded by a first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents including at least video; first management information for managing and controlling said first entity information; one or a plurality of second entity information,  
15 which is compressed and encoded by a second compressing and encoding method, which is different from the first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents same as or different from the contents of said first entity information; and second management  
20 information for managing and controlling said first and second entity information,

said apparatus comprising:

a reading device for reading out information from the information recording medium;

- 25 a judgment device for judging whether or not the second management information is recorded on the information recording

medium on the basis of the read information; and

a reproduction output device (i) for reproducing and outputting the first or second entity information in accordance with the second management information if it is judged by said judgment device that the second management information is recorded and (ii) for reproducing and outputting the first entity information in accordance with first management information if it is judged by said judgment device that the second management information is not recorded.

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20. A computer program product in a computer-readable medium for tangibly embodying a program of instructions executable by a computer to make the computer function as an information reproducing apparatus for reproducing an information recording medium, on which there are recorded: one or a plurality of first entity information, which is compressed and encoded by a first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents including at least video; first management information for managing and controlling said first entity information; one or a plurality of second entity information, which is compressed and encoded by a second compressing and encoding method, which is different from the first compressing and encoding method, for individually constituting Titles, each of which is a logical combination of contents same as or different from the contents of said first entity information; and second management information for managing and controlling said first and second entity

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information, wherein said second management information includes,  
for each Title (i) number information for indicating an identification  
number of said first or second entity information, which is uniquely  
given to each Title and (ii) identification information for identifying  
5 whether said number information indicates the identification  
number of said first entity information or the identification number  
of said second entity information,

said apparatus comprising:

a selection device for selecting a Title to be reproduced out of  
10 the Titles recorded on the information recording medium;

a reading device for reading out information from the  
information recording medium;

a judgment device for judging whether or not the second  
management information is recorded on the information recording  
15 medium on the basis of the read information;

a first identification device for identifying an identification  
number of the first or second entity information corresponding to the  
selected Title, in accordance with the number information in the  
second management information if it is judged by said judgment  
20 device that the second management information is recorded;

a second identification device for identifying whether the  
recognized identification number is the identification number of the  
first entity information or the identification number of the second  
entity information, on the basis of the identification information in  
25 the second management information; and

a reproduction output device for reproducing and outputting

the first or second entity information corresponding to the selected Title on the basis of identification results by said first and second identification devices.